

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.(Currently Amended) A high pressure sodium lamp having a nominal power P_{la} , a discharge tube with a ceramic wall and an internal vessel diameter D_{int} , enclosing a discharge space in which a pair of electrodes at a mutual electrode distance ed and a filling of Na-amalgam with a sodium mol fraction (smf), a ratio of the internal discharge vessel diameter D_{int} to the nominal lamp power P_{la} being substantially in a range of $0.045 \leq D_{int}/P_{la} \leq 0.08$, wherein a ratio of the mutual electrode distance ed to the nominal power P_{la} is substantially in a range of $0.2 \leq ed/P_{la} \leq 0.35$.

2.(Previously Presented) The high pressure sodium lamp 1, wherein a thickness of the wall (wt) is $0.4 \leq wt \leq 0.6$ mm.

3.(Previously Presented) The high pressure sodium lamp claim 1, wherein the lamp has a wall load of at most 30 W/cm^2 .

4.(Previously Presented) A high pressure sodium lamp having a nominal power P_{la} , and comprising:

a discharge tube with a ceramic wall and an internal vessel diameter D_{int} , enclosing a discharge space;

a pair of electrodes at a mutual electrode distance ed ; and

a filling of Na-amalgam with a sodium mol fraction (smf) substantially in a range of $0.6 < \text{smf} < 0.75$, wherein the discharge tube has a ratio e_d / D_{int} between about 5.5 and 4.0;

a ratio of the mutual electrode distance e_d to the nominal power P_{la} being substantially in a range of $0.2 \leq e_d / P_{\text{la}} \leq 0.35$; and

a ratio of the internal discharge vessel diameter D_{int} to the nominal lamp power P_{la} being substantially in a range of $0.045 \leq D_{\text{int}} / P_{\text{la}} \leq 0.08$.

5.(Previously Presented) The high pressure sodium lamp according to claim 1, wherein the filling further comprises Xe having a pressure at room temperature in the range of $400 \text{ mbar} \leq p_{\text{Xe}} \leq 1000 \text{ mbar}$.

6.(Previously Presented) The high pressure sodium lamp according to claim 1, wherein the electrodes are provided with emitter and wherein each of the electrodes has an electrode diameter, which specified relatively to the average lamp current (I_{la}) at nominal lamp power fulfils the relation: $0.2 < (D_{\text{electrode}})^2 / I_{\text{la}} < 0.45$.

7.(Previously Presented) The lamp of claim 1, wherein the lamp emits light in nominal operating condition with a color temperature T_c of at most 2500K.

8.(Previously Presented) A lighting system comprising a full electronic very high frequency (VHF) ballast for operating a lamp according to claim 1.

9.(Previously Presented) The lighting system according to claim 8, wherein the VHF ballast is provided with resonant ignition means by which resonant ignition is applied on igniting the lamp.

Claim 10 (Canceled)

11.(Previously Presented) The high pressure sodium of claim 1, wherein the Na-amalgam has a sodium mol fraction (smf) substantially in a range of $0.6 < \text{smf} < 0.75$.

12.(Previously Presented) The high pressure sodium of claim 1, wherein the discharge tube has a ratio ed/D_{int} substantially between about 5.5 and 4.0.

13.(Previously Presented) The high pressure sodium lamp 4, wherein a thickness (wt) of the ceramic wall is substantially between $0.4 \leq \text{wt} \leq 0.6$ mm.

14.(Previously Presented) A high pressure sodium lamp having a nominal power Pl_a , and comprising:

a discharge tube with a ceramic wall and an internal vessel diameter D_{int} , enclosing a discharge space;

a pair of electrodes at a mutual electrode distance ed ; and

a filling of Na-amalgam;

a ratio of the mutual electrode distance ed to the nominal power Pl_a being substantially in a range of $0.2 \leq ed/Pl_a \leq 0.35$.

15.(Currently Amended) The high pressure sodium of claim 14, wherein a ratio of the internal discharge vessel diameter D_{int} to the nominal lamp power Pl_a is substantially in a range of $0.045 \leq D_{\text{int}}/Pl_a \leq 0.08$.

16.(Previously Presented) The high pressure sodium of claim 14, wherein the Na-amalgam has a sodium mol fraction (smf) substantially in a range of $0.6 < \text{smf} < 0.75$.

17.(Previously Presented) The high pressure sodium of claim 14, wherein the discharge tube has a ratio e_d / D_{int} substantially between about 5.5 and 4.0.

18.(Previously Presented) The high pressure sodium lamp 14, wherein a thickness (wt) of the ceramic wall is substantially between $0.4 \leq wt \leq 0.6$ mm.